

Investor Sentiment and the Pricing of Characteristics-Based Factors

README: Data and Codes Documentation

This document outlines the data sources and codes used to generate the results presented in the paper.

1 Data sources

The data used in this paper are obtained from the following sources:

- 1) CRSP for stock return data are downloaded via WRDS;
- 2) Compustat for stock accounting data are downloaded via WRDS;
- 3) Lipper TASS for hedge fund data are downloaded via WRDS;
- 4) Thomson/Refinitiv Mutual Fund Holdings (S12), MFLINKS and CRSP Mutual Fund Database for mutual fund data are downloaded via WRDS;
- 5) Sentiment indices are from various sources:
 - a) Baker and Wurgler (2006) sentiment index: <https://pages.stern.nyu.edu/~jwurgler/>;
 - b) Michigan Consumer Sentiment Index: <https://data.sca.isr.umich.edu/data-archive/mine.php>
 - c) Conference Board Consumer Confidence Index: <https://data-central.conference-board.org/>
 - d) Huang et al. (2015) augmented sentiment index (PLS):
<https://fuweijiang.weebly.com/research.html>
 - e) American Association of Individual Investors Sentiment Index:
https://www.aaii.com/sentimentsurvey/sent_results
- 6) Ten macro-related factors are constructed following Shen, Yu and Zhao (2017) with the raw data from three sources:
 - a) Monthly macroeconomic measures and bond market spreads: <https://fred.stlouisfed.org/series>
 - b) Quarterly total factor productivity: <https://www.johnferald.net/TFP>
 - c) Stock market volatility and market excess return:
https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html
- 7) State variables and other datasets:
 - a) NBER recessions: <https://fred.stlouisfed.org/series/USREC>
 - b) cay: <https://sites.google.com/view/martinlettau/data>
 - c) Welch and Goyal (2008) 14 equity premium predictors: <https://sites.google.com/view/agoyal145>

The data in (1), (2), (3), and (4), as well as certain series in (5), require paid subscriptions and are subject to Non-Disclosure Agreements. Therefore, the original datasets cannot be shared.

2 Codes

The following is a list of codes used to generate the tables and figures in this paper:

- 1) Compute_beta.sas: Calculation of characteristics-factor betas for stocks, mutual funds and hedge funds, and macro-factor betas for stocks
- 2) Figure1.sas: Figure 1
- 3) Table_Stock.sas: Tables 1, 2 (Panels A,B, and C), 3, 4, 5, 6, 9, 10, 11, and 12
- 4) Table2_PanelC_Avg.do: Average portfolios in Table 2 Panel C
- 5) Table2_PanelDE: Table 2 Panels D and E
- 6) Table2_PanelF: Table 2 Panel F
- 7) Table_MF.sas: Table 7
- 8) Table_HF.sas: Table 8
- 9) Table13.sas: Table 13

References

- Baker, M., and J. Wurgler. 2006. Investor sentiment and the cross-section of stock returns. *Journal of Finance* 61:1645–80.
- Welch, I., and A. Goyal. 2008. A comprehensive look at the empirical performance of equity premium prediction. *Review of Financial Studies* 21:1455–508.
- Huang, D., F. Jiang, J. Tu, and G. Zhou. 2015. Investor sentiment aligned: A powerful predictor of stock returns. *Review of Financial Studies* 28:791–837.
- Shen, J., J. Yu, and S. Zhao. 2017. Investor sentiment and economic forces. *Journal of Monetary Economics* 86:1–21.